the characteristics common to tasks comprising the clusters, are assigned a specific class of agents so that when a user invokes a task, the appropriate intelligent GUI agent is displayed.

In rejecting independent claims 1, 5, and 8 under 35 U.S.C. § 102(e), the Examiner has cited U.S. Patent No. 5,790,789 to Suarez (Suarez). Suarez discloses a distributed computing system including a plurality of intelligent agents which execute on the computer hosts in the distributed computing system and which are associated with one or more services. In Suarez, an agent exercises control of an associated service by manipulating the electronic messages directed to and originating from the associated service. While Suarez discloses a user interface to the system (see Fig. 1, reference numeral 13), there is no discussion of GUI agents being provided to assist a user 13 in performing a specific task. Suarez discloses agents more deeply within the system, not at the user interface to assist in task performance. Thus, Applicants traverse the Examiner's rejection as detailed below.

For example, the Examiner cites Suarez, column 6, lines 58-67 through column 7, lines 1-14 as anticipatory of Applicants "receiving data assessing at least two user assessment variables for each of a set of plurality of tasks." Nothing in the cited portion of Suarez relates to Applicants' "receiving data assessing at least two user assessment variables for each of said plurality of tasks." Applicants disclose on pages 9-11, determining the universe of tasks which are candidates for the application of intelligent interface agents. Each of the tasks is then evaluated by a representative sample of potential users in order to determine the level of

difficulty, importance and frequency. This assessment results in a measured score for each variable for each user in the sample. After ipsatizing sample scores, statistical processes are used to analyze the sample scores. Significance is determined by evaluating the probability that a result would occur by chance in a set of multiple trials. In the preferred embodiment this probability must be less than a given value.

Other statistical analysis, McLean's multivariate clustering analysis, is used to cluster tasks into mutually exclusive clusters. The analysis continues until distinguishable clusters are found. The distinguishable clusters are then assigned guide or wizard agents which will be provided to a user to facilitate the user's execution of a task in that cluster.

In view of the above, Applicants respectfully traverse the application of 35 U.S.C. § 102(e) to their step of "performing multivariate analysis..." Suarez, column 9, lines 60-67 through column 10, lines 1-11, refers to Figs. 1 and 2 and describes a process flow as being comprised of one or more activities which are performed on a work item in a prescribed sequence. A variety of other information is associated with each processor process flow. This other information includes agents among others. However, nothing in the cited portion of the reference relates to performing multivariate analysis to derive from a plurality of tasks, exclusive clusters of tasks having common characteristics making them suitable to a particular GUI agent.

The Examiner next cites column 10, lines 1-11 of Suarez and Figure 2 as anticipatory of Applicants' step of "storing an association linking each of said

intelligent agents with one of said mutually exclusive clusters." While Suarez does disclose associating agents with services, Applicants assert that Suarez's services are not the same as Applicants' mutually exclusive clusters of tasks which were derived in the performing multivariate analysis step.

The Examiner then cites lines 12-39 of column 10 of Suarez as anticipating Applicants' step of "launching an intelligent agent for a task chosen for execution by a user." That portion of Suarez describes Figure 3 which illustrates the general relationships between an agent and a service. Because Suarez does not deal with GUI agents to facilitate the user's execution of a chosen task, Applicants disagree with the Examiner that the teaching of Suarez is anticipatory or equivalent to Applicants' launching step. Applicants concede that Suarez teaches agents and their use and at some point they are invoked or launched, but the agents are not graphical user interface agents and they are not associated with a given task using means equivalent to those taught by Applicants.

Applicants' technique for choosing an agent for a task proceeds from an examination of all possible tasks, performing statistical analysis on those tasks based on the variables of frequency, level of difficulty and importance. See specification, pages 7, line 15 through page 9, line 13. More particularly, the process for determining application of intelligent agents to a given task is described with reference to Figure 3 in the instant application.

The amendments proposed herein by Applicants to claims 1, 5 and 8 more particularly define their invention as a method of facilitating a user in executing

tasks by determining, for any task the appropriate agent type to be presented to the user as a graphical user interface.

With regard to the rejection of claims 1 through 7 under 35 U.S.C. § 101, Applicants believe that the amendments proposed herein remove the Examiner's stated concern in the June 8, 1999 office action. In particular, Applicants point out that, as now amended, the claims more definitively describe what Applicants regard as their invention: a method of assigning tasks to agent types to facilitate the user's execution of a user chosen task. That is, by performing the information gathering and statistical analysis thereof, Applicants' invention provides for a particular intelligent agent, wizard or guide, to be provided to a user when executing a particular task.

With regard to the objection to claim 9 as being dependent on a rejected base claim, Applicants believe that the amendment made to claim 8 renders it patentable over the Suarez reference. Thus, Applicants urge that there is no reason to rewrite claim 9 to include the limitations of claim 8.

Applicants request reexamination of the claims as amended, in view of the arguments advanced herein. All the independent claims include references to a computer system or data processing system. Support for these references is found in the application as filed at page 7, lines 5-17. Claim 1 recites a method implemented in a computer for supplying an intelligent GUI agent to a user, wherein the agent is chosen in accord with the data gathering and analysis steps recited. Claim 5 recites a computer system analog of Claim 1. Claim 8 recites a computer program product including a computer readable medium. Each independent claim

recites activity following the statistical analysis. Claim 1 includes the step of displaying a GUI agent; Claim 5, means for displaying. Claim 8 likewise describes means for displaying. Basis for "displaying" is found on page 7, lines 5-7 of the specification.

Respectfully submitted,

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